



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,333	03/12/2004	Lewis H. Miller	Miller2004	6224

27059 7590 03/14/2007  
MARTIN S. HIGH  
P.O. BOX 217  
STILLWATER, OK 74076

EXAMINER
----------

WIEHE, NATHANIEL EDWARD

ART UNIT	PAPER NUMBER
----------	--------------

3745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/799,333

Applicant(s)

MILLER, LEWIS H.

Examiner

Nathan Wiehe

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 and 3 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 4 January 2007 have been fully considered but they are not persuasive.

It is noted that the deletion of the claim limitation of outside support cables and rotor support cables has removed the need for the elements taught by Ewers. Accordingly, the rejections in this action are made without the teachings of Ewers. However, the cables disclosed by Ewer would be sufficient to meet the limitation of frame support cables as currently claimed.

Applicant argues that the combining the references of McVey, Bender and Ewers would not arrive at the invention as claimed. First, Applicant states that the support cables of Bender and Ewers are not integral to the frame structures. However, the support cables being integral to the frame is not a claim limitation. Additionally the support wires of Bender are "integral" to the frame since they are internally arranged in the support legs (3). Applicant further argues that the "integral" arrangement of Bender precludes it from being scaleable and stackable. The examiner disagrees since the arrangement of Bender could be easily and readily adapted to the structure of McVey by including support wires between outer support elements (III and II) in a manner corresponding to the arrangement disclosed by Bender. Also, the cables of Bender provide for reinforcement of the frame members, thus providing necessary motivate for one of ordinary skill in the art to look to the teachings of Bender to modify the structure of McVey.

It is also noted that applicant has not traversed the substantive modification of the prior art by the teaching of McCabe.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over McVey 4,486,143 in view of Bender 4,687,415. McVey discloses a stackable vertical axis windmill A substantially as claimed, comprised of a frame structure 11, 12, 13 and a rotor assembly T, with the frame structure comprised of plural solid frames 38/39, plural open frames 11/12, with the rotor assembly comprised of plural horizontal rotor assembly supports 35a, 35b, a rotor axis near 10, rotor panel assembly supports 36, a bottom flange assembly 29, a flex coupling assembly (elements 30, 30a, 30b, and 31 which provide some degree of flexibility when assembling the shaft 26 to the flange assemblies 29) and a top flange assembly 29.

However, McVey does not disclose that the frame structure is comprised of plural frame support cables.

Bender (figure 1) shows a vertical windmill having a frame 3 with plural frame support cables 23, for the purpose of reinforcing the frame.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the frame 11, 12, 13 of McVey with plural frame support cables, as taught by Bender, for the purpose of reinforcing the frame.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McVey 4,486,143 and Bender 4,687,415 as applied to claim 2 above, and further in view of McCabe 5,711,653. The modified windmill of McVey shows all of the claimed subject matter except for the rotor assembly having the rotor panel assemblies formed of a rotor panel, a trailing edge, a leading edge, and a windfoil such that the trailing edge, leading edge, and windfoil are elongated structures affixed to the rotor panel parallel with the rotor axis.

McCabe (figure 3) shows a windmill rotor having rotor panel assemblies formed of a rotor panel 10, a trailing edge c, a leading edge a, and a windfoil d such that the trailing edge, leading edge, and windfoil are elongated structures affixed to the rotor panel, for the purpose of providing improved lift to allow more torque at lower speeds.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified windmill of McVey such that the blades 35 are in the form of a rotor panel, a trailing edge, a leading edge, and a windfoil such that the trailing edge, leading edge, and windfoil are elongated structures affixed to the rotor panel parallel with the rotor axis, as taught by McCabe, for the purpose of providing improved lift to allow more torque at lower speeds.

***Allowable Subject Matter***

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Wiehe whose telephone number is (571)272-8648. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7am-4:30pm EST.

Art Unit: 3745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan Wiehe  
Examiner  
Art Unit 3745



EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

3/12/07